

**NIEHS Worker Education and Training Program
September 2006 Technical Conference**

**9/11 RESPONSE, RECOVERY,
AND CLEANUP EFFORTS -
LESSONS (NOT YET) LEARNED**

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**NYCOSH's 9/11 work is conducted in partnership with
National Disaster Ministries, United Church of Christ.**



Why are we all here?



- We train and educate workers who engage in hazardous materials and emergency response activities.
- Many of us engage in hazmat and emergency response operations ourselves.

What are our goals in hazmat & emergency response operations?



- Ensure the effective removal of environmental contaminants.
- Protect worker health.
- Protect public health.

In preparing for or engaging in hazmat & emergency response operations, **we make certain fundamental assumptions:**

- That the regulatory framework under which we operate provides a sound basis for achieving our goals.
- That the training that we have received and that we offer reflects the real-life scenarios that we are likely to encounter.

Our experiences in responding to man-made and natural disasters such as 9/11 and Katrina demonstrate that these assumptions are not valid.

Welcome to post-9/11 Lower Manhattan



- Were our goals achieved?
 - Effective removal of environmental contaminants - **NOT ACHIEVED.**
 - Protection of worker health - **NOT ACHIEVED.**
 - Protection of public health - **NOT ACHIEVED.**

Welcome to post-9/11 Lower Manhattan

- # of workers on pile: >40,000
- # of cleanup workers off pile: Unknown
- % of responders with chronic, disabling illness: 70%
- Residential population: 120,000
- # of residences cleaned by EPA: 4,167
- Technical adequacy of residential cleanup: Poor
- Daily work population: >250,000
- % of workplaces cleaned by EPA: Zero



- % of residences, schools, & workplaces that were contaminated: Unknown
- % of residences, schools, & workplaces that remain contaminated: Unknown
- % of residences, schools, & workplaces that were privately cleaned: Unknown
- % of downtown workers who are ill: Unknown
- % of downtown residents who are ill: Unknown

Welcome to post-9/11 Lower Manhattan



(Not Yet) Learned Lesson #1:

REFUSAL TO ENFORCE REGS COSTS LIVES



- OSHA policy: no enforcement of Respiratory Protection Standard, Hazwoper Standard (or any other legal standard) at or around Ground Zero.
- Result: Rate of respirator use at Ground Zero 20 – 60%.
- Result: Rate of respirator use among cleanup workers 0%.
- **Result: unnecessary and avoidable chronic, persistent, disabling illnesses and fatalities.**

(Not Yet) Learned Lesson #2:

POLITICAL INTERFERENCE IN RISK ASSESSMENT COSTS LIVES



- “When EPA (announced) that the air was ‘safe’ to breathe, the Agency did not have sufficient data and analyses to make the statement. The White House Council on Environmental Quality influenced...EPA to add reassuring statements and delete cautionary ones.” (EPA Office of Inspector General, August 2003)
- **EPA’s false assurances of lack of risk gave a green light to employers and workers not to use respiratory protection and to landlords, employers, and government agencies that remediation of contaminants was not necessary.**

(Not Yet) Learned Lesson #3:

NATIONAL RESPONSE PLAN ALLOWS AGENCIES TOO MUCH DISCRETION



- 9/11 provoked a mad rush among federal, state, & city agencies away from responsibility, authority, and enforcement.
- **Large-scale disasters should require a federally coordinated response with EPA and OSHA as clearly delineated lead agencies with enforcement power.**

(Not Yet) Learned Lesson #4:
**REGULATORY GAPS
ENDANGER HEALTH**

For example:

- “No reports in the literature could be found on a similar circumstance where there is...an area source at ground level continually emitting dioxin near to where individuals are exposed... The concentrations... within and near the WTC site...are likely the highest ambient concentrations that have ever been reported.” (EPA, Exposure and Human Health Evaluation of Airborne Pollution from the World Trade Center Disaster, October 2002)



- **There are no regulatory limits for exposure to dioxin.**

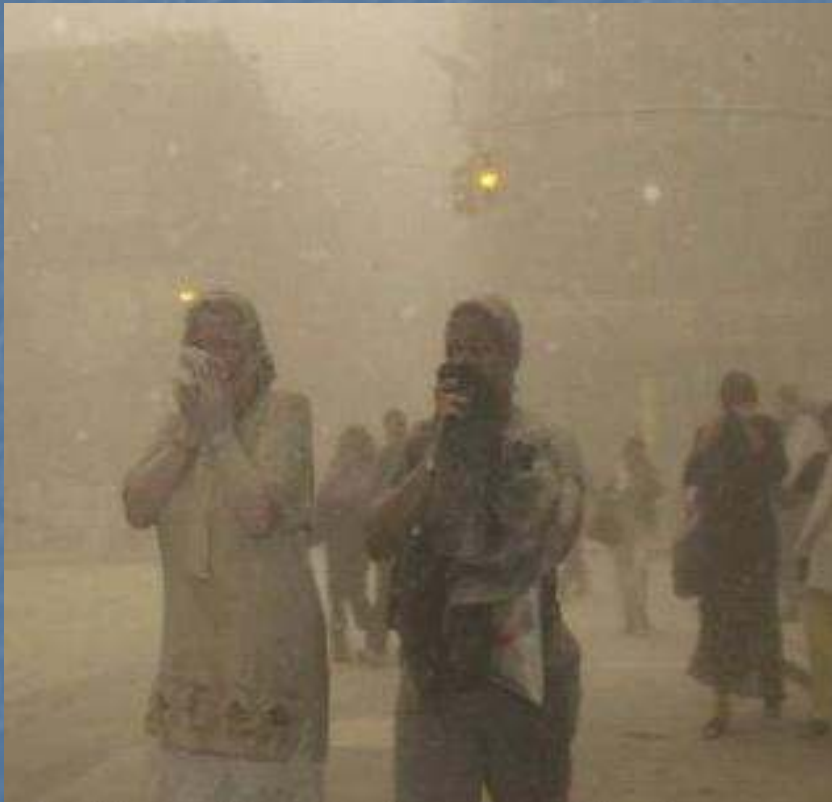
(Not Yet) Learned Lesson #5:
**REGULATORY GAPS
ENDANGER HEALTH**



- Most exposure limits that do exist assume chronic exposure scenarios.
- We need to develop **acute exposure** guidelines and **sub-chronic exposure** guidelines for high-priority substances.

(Not Yet) Learned Lesson #6:

SITE CHARACTERIZATION IS ESSENTIAL



- Site characterization is on-site investigation to determine the type(s) and extent of contamination.
- Site characterization is a prerequisite to hazard analysis and to selection of appropriate engineering controls, PPE, and respiratory protection.
- **EPA has conducted site characterization at every major chemical or hazardous waste release in the country over the last 20 years, except for Lower Manhattan.** (Hugh Kaufman, EPA Senior Policy Analyst)

(Not Yet) Learned Lesson #7:

THE RESCUE PHASE MUST HAVE A TIME LIMIT



- Survival times of trapped disaster victims is measured in days, not weeks or months.
- At Ground Zero, the “rescue” phase lasted 9 months.
- **The rescue phase was used as a pretext by government agencies to avoid responsibility and enforcement.**

(Not Yet) Learned Lesson #8:

RECOGNIZE AN EXPANDED FIRST RESPONDER POPULATION



- “Non-traditional” 9/11 first responders included construction workers, security guards, maintenance workers, teachers, train and bus operators, and others.
- The population of workers that receives first responder training and that has access to PPE and respiratory protection must be expanded.

(Not Yet) Learned Lesson #9:

ACKNOWLEDGE THAT CLEANUP WORKERS ARE AT RISK



- Thousands of immigrant day laborers “shaped up” to remove contaminated dust and debris from area buildings.
- They had no training, respirators, PPE, or access to medical care.
- OSHA issued a “negative exposure assessment” supporting contractors’ discouragement of respirator use.
- **Day laborers are ill at rates similar to those of Ground Zero workers.**

(Not Yet) Learned Lesson #10:

RESPIRATORS ARE THE WEAK LINK IN WORKER PROTECTION



- Poor design causes discomfort, sweating, and difficulty communicating.
- These conditions result in:
 - Respirator slippage, compromising the seal and endangering the wearer, or
 - Deliberate removal of the respirator by the user.
- **Respirators must be redesigned for comfort and communication.**
- **Until then, lengths of work shifts that require respirator use should be limited.**

(Not Yet) Learned Lesson #11:

RESPONDERS & RECOVERY WORKERS NEED HEALTH PROTECTION

Workers at disaster sites:

- May be exposed to uncontrolled releases
- Are less likely to be experienced and adequately trained
- Have poorer access to PPE and respiratory protection.
- **Workers at disaster sites need regular medical monitoring and may need access to competent long-term health care.**





NEW YORK COMMITTEE FOR OCCUPATIONAL SAFETY AND HEALTH

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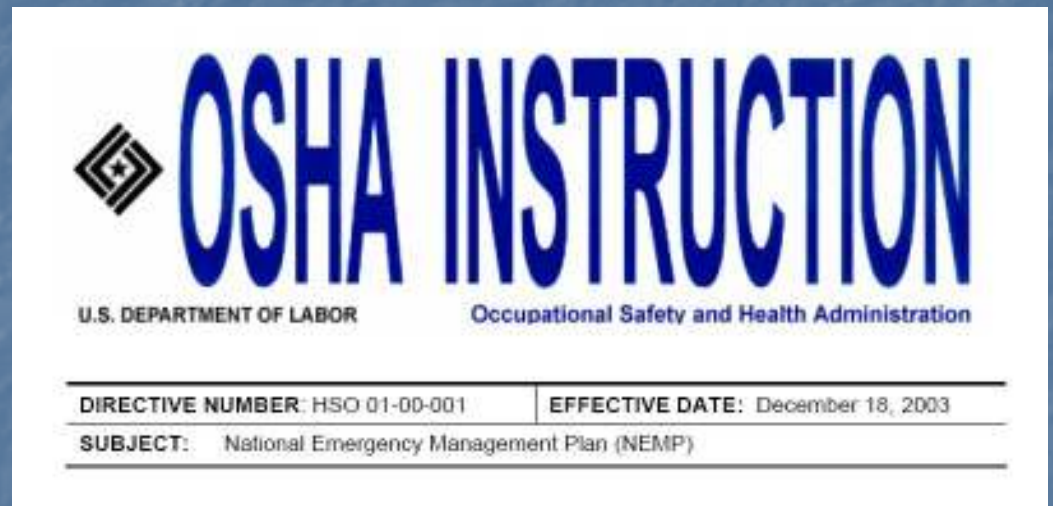
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Local 4-149



Addendum: NON-ENFORCEMENT IS NOW OFFICIAL OSHA POLICY IN DISASTER RESPONSE

- **“OSHA's role at the WTC...was one of technical assistance, risk management, and consultation.” (p. 1)**



- **“When the NEMP is activated, any decision to discontinue consultation and assistance in favor of enforcement, including at what point during an incident this transition should occur, if at all, will be made by the Regional Administrator in consultation with the Assistant Secretary, Deputy Assistant Secretary, or designee.” (p. 2)**